

**Solutions :**

- |                             |                             |
|-----------------------------|-----------------------------|
| 1. a) convergent            | g) convergent               |
| b) divergent                | h) convergent               |
| c) convergent               | i) conditionally convergent |
| d) convergent               | j) divergent                |
| e) divergent                | k) absolutely convergent    |
| f) conditionally convergent | l) divergent                |

2. 0.842

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|---|---|
| 3. a) radius 1, interval $[-1, 1]$                | e) radius 1, interval $(-1, 1]$                                   |
| b) radius 2, interval $[-2, 2]$                   | f) radius 1, interval $[1, 3]$                                    |
| c) radius $\infty$ , interval $(-\infty, \infty)$ | g) radius $\frac{1}{3}$ , interval $[-\frac{4}{3}, -\frac{2}{3}]$ |
| d) radius 0, interval $\{0\}$                     |   |